

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of

Technology Transitions Policy Task
Force Public Notice Regarding Potential
Trials

GN Docket No. 13-5

COMMENTS OF PUBLIC KNOWLEDGE

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SUMMARY

As the Commission considers its proposed pilot programs for the phone network transition, it must first recognize the very real lessons to be learned from the consequences of Verizon's recent decision to replace its copper infrastructure with a fixed wireless service in certain communities hit by Hurricane Sandy last October.

Lessons from Verizon's Failed Fire Island Voice Link Deployment.

The Commission noted in passing in the instant *Public Notice* that Verizon is, subject to approval by the New York Public Service Commission (NY PSC), determined to replace copper facilities on Fire Island with its wireless "Voice Link" product.¹ The Commission stated that it "hope[d] to learn from these ongoing efforts."² In the two months since Verizon began its "involuntary beta test" for Fire Island, one lesson has become abundantly clear.

Consumers hate being used as guinea pigs against their will.

As of the date of this filing, more than half of the permanent residents of Fire Island have written negative comments on Verizon's Voice Link deployment.³ Residents have complained about poor voice quality,⁴ loss of international calling services,⁵ and loss of the ability to process

¹ *Technology Transitions Policy Task Force Seeks Comment on Potential Trials*, WC Docket No. 13-5, Public Notice at 8, n.30 (rel. May 10, 2013) ("Trials Public Notice").

² *Id.*

³ New York State Public Service Commission, *Tariff Filing by Verizon New York Inc. to Introduce Language Under Which Verizon Could Discontinue Its Current Wireline Service Offerings in a Specified Area and Instead Offer a Wireless Service as Its Sole Service Offering in the Area*, Case 13-C-0197, <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterSeq=42688> ("New York Tariff Filing by Verizon"). See also Bruce Kushnick, *Fire Island Erupts Over Verizon Wireless Voice Link*, HUFFINGTON POST (July 2, 2013), http://www.huffingtonpost.com/bruce-kushnick/fire-island-erupts-over-v_b_3531584.html.

⁴ Comments of Point O' Woods Association, *New York Tariff Filing by Verizon* (July 3, 2013); Comment of Jean Uffer, *New York Tariff Filing by Verizon* (July 8, 2013).

⁵ Comment of Liv Hempel, *New York Tariff Filing by Verizon* (July 1, 2013).

credit card payments or send and receive faxes.⁶ One permanent resident describes her desperate need for a landline so that the local hospital can monitor her husband's pacemaker.⁷

But above all else, consumers filing in the NY PSC Voice Link express their outrage and sense of betrayal. "I am absolutely SHOCKED that Verizon is simply pulling the plug on ALL landline/internet service to this otherwise fully viable and thriving *post-Sandy* community."⁸ "Please do not allow Verizon to put us in even more jeopardy by taking away our landline service and forcing us to rely on a half-baked wireless service."⁹ "Fire Islanders shouldn't be treated as 2nd class citizens."¹⁰ "Please don't allow Verizon to cut our lines without offering a suitable option. VOICE LINK DOESNT WORK."¹¹

Verizon's botched Fire Island "pilot" has become a textbook case on how to alienate a community and send ripples of fear with regard to the upcoming transition of the Public Switched Telephone Network (PSTN) through the general public. Verizon's continued insistence that it believes its service is sufficient despite missing features¹² only furthers the belief that Verizon is not listening to the very real concerns of the public on this critical policy matter.

⁶ See Cecilia Kang, *Verizon Wireless Pursues All-Wireless Phone Service In Seaside Town*, THE WASHINGTON POST (July 5, 2013), http://www.washingtonpost.com/business/technology/verizon-pursues-all-wireless-phone-service-in-seaside-ny-town/2013/07/04/9120fa80-ac4c-11e2-a198-99893f10d6dd_story.html.

⁷ Comment of Jean Uffer, *New York Tariff Filing by Verizon* (July 8, 2013).

⁸ Comment of Robert Sherman, *New York Tariff Filing by Verizon* (July 5, 2013) (emphasis in original).

⁹ Comment of Barbara Gaby, *New York Tariff Filing by Verizon* (July 8, 2013).

¹⁰ Comment of David Lipsky, *New York Tariff Filing by Verizon* (July 6, 2013).

¹¹ Comment of Barbra Heller, *New York Tariff Filing by Verizon* (July 6, 2013) (emphasis in original).

¹² See Kang *supra* note 6.

Community Engagement and Consumer Safeguards Will Be Key to Any Successful Pilot Program.

Verizon's ill-received Voice Link "pilot program" demonstrates that communities cannot be forced to transition to a new technology without risking disastrous results. This is doubly true if the provider unilaterally decides to completely remove support for features that had previously relied upon the existing network infrastructure. Services that providers do not consider crucial, such as the ability to send and receive faxes, may be of considerable importance to subscribers. Voice quality issues, particularly with regard to copper-to-wireless conversions, worry both residential and small business customers. Providers seeking to engineer successful pilot programs will not seek to ride roughshod over community objections.

This requires deliberation and significant advanced planning. Fire Island proves the wisdom of the deliberate approach taken by the Commission's staff. Those dancing with impatience to start shifting consumers to untried services and new technologies, who characterized this public notice as a "missed opportunity,"¹³ should take the lesson of the Fire Island debacle to heart. By requiring more detailed plans and appropriate consumer protections, the task force has saved those eager to rush in from the consequences of their own folly.

The headlong rush into the unknown, first proposed by AT&T and urged since then by others, will not hasten the deployment of new services for the benefit of all Americans. Rather, as with the attempt to force Voice Link on an unwilling Fire Island, a hasty and poorly constructed pilot program will do more to delay the technological transition than any delay taken to plan a proper pilot.

¹³ See, e.g., Statement of Commissioner Ajit Pai on the Technology Transitions Policy Task Force's Public Notice (May 10, 2013), <http://www.fcc.gov/document/pais-statement-public-notice-technology-transitions-task-force>.

Factors to Construct A Successful Pilot Program

As the Commission considers its proposed pilot programs, Public Knowledge urges the Commission to ensure that the phone network transition continues to serve the basic values underlying our communications policy that have for decades succeeded in creating a reliable, high-quality communications infrastructure. Throughout and after any pilot programs, the network should continue to ensure service to all Americans, interconnection and competition, consumer protection, network reliability, and public safety.

Any data collected during the pilot programs will only be useful to the extent that it can reliably tell us whether we are serving those five basic values. A pilot program itself does not, and should not, set the policy for what we hope to achieve in the post-transition network. A pilot program is a fact-gathering expedition. It is not a policy-setting process in itself, and it is certainly not a glide path to deregulation. The trials must therefore be carefully circumscribed to responsibly collect necessary information without harming the real-life consumers using the network during the trial.

The Commission must ensure that any pilot programs it implements include strong consumer protections and plans for ending the trials if problems occur that impose harms on subscribers—who, after all, did not choose to be part of the trial in the first place. If the Commission creates pilot programs to shed light on the phone network transition, it should also carefully circumscribe those programs to gather specific data that will help inform the Commission's policy on one or more of the five fundamentals of the phone network. This will require close collaboration with state and local authorities and local community groups to achieve effective outreach to consumers, and any resulting data gathered during the pilot

program should be made publicly available to better inform the debate surrounding the phone network transition.

ARGUMENT

I. Components of a Responsible Pilot Program

A pilot program for the phone network transition must be a controlled effort to gather a specific set of data, and its plans must include transparency, public participation, collaboration between federal, state, and local agencies, and predetermined plans for winding down the trial without harming the consumers who were a part of it.

A. The Pilots Should Be Specifically Designed to Gather Data to Inform Policy.

The utility of the proposed phone network transition pilot programs lies entirely in their ability to gather data to inform how best the phone network transition can be shaped to serve the values that underlie our national communications policy. The pilot programs themselves cannot be expected to produce policy, but they can potentially produce information that informs that policy. To that end, the Commission should ensure that the pilot programs are carefully designed to answer specific questions and gather specific sets of data.

It is also crucial that the Commission design the pilot programs to gather the right *type* of data. For example, technical information about the various physical changes the network could undergo in its transition to internet protocols (IP) could infuse the discussion about the transition with useful metrics regarding what possible network outcomes authorities could choose to encourage or discourage, require or prohibit in the final outcome. In contrast, behavioral information that only gives data points for how carriers will conduct themselves during public, supervised, time-limited trials with the possible reward of deregulation on the horizon will

necessarily give us extremely limited and even misleading information about how the industry will operate moving forward on a permanent basis.

Moreover, pilot programs that simply give carriers *carte blanche* to behave well while authorities are looking over their shoulders could be misconstrued as creating an unconsidered glide path to deregulation. This approach would effectively let the pilot programs' carrier participants become arbiters of the future of our communications networks, and would completely circumvent the broader ongoing debate about the fundamental principles that the phone network should serve.

The Commission should be particularly wary of losing control over pilot programs if the Commission allows a more general geographic trial or combines multiple targeted trials to a particular area. The broader the aims of any one trial, the more tempting it will be for particular stakeholders to try to use those trials as tools that bypass deliberate policymaking instead of informing it. The Public Notice therefore quite rightfully notes that proponents of any general trials must submit much more detailed information about how those trials would operate and exactly what information they would gather before the Commission could even begin to consider them.¹⁴

B. The Pilot Programs Must Be Transparent.

Transparency is key to making the pilot programs a success. This includes both transparency in the pilot program design process and making the information gleaned from the pilot programs available to the public to fully inform the public debate. The phone network transition promises to impact network users across the entire nation, and it is vital that every

¹⁴ Trials Public Notice at 3.

interested stakeholder have the opportunity to review, comment on, and use the data collected during the pilot programs.

In this respect it is particularly important that the Commission not treat instances of carrier-initiated transitions as legitimate pilot programs. As noted above, in certain areas Verizon has decided not to repair or rebuild its copper network and instead only offer customers a fixed wireless service called Voice Link.¹⁵ Although Verizon may provide some more useful information about Voice Link in the ongoing approval processes at the Commission and the New York State Public Service Commission, it is certain that, absent any particular request for follow-up information from state or federal authorities, the detailed data gathered by Verizon during and after Voice Link deployment will not be made publicly available in any comprehensive, objective way. To the extent that any information is released at all, it will necessarily be mediated by Verizon before it reaches the public. The Commission should therefore reject any impulse to treat the Voice Link deployment in New York and New Jersey—or any situation where a carrier chooses to move forward with the phone network transition on its own initiative—as informative in any positive way, and instead focus on efforts in which the Commission can make sure the trials gather specific, useful information in controlled circumstances and open that information to the public to inform the debate surrounding the phone network transition.

¹⁵ Letter from Keefe B. Clemons, General Counsel – Northeast Region, Verizon, to Hon. Jeffrey Cohen, Acting Secretary, New York State Public Service Commission, *Re: Proposed Amendments to Verizon New York Inc. Tariff PSC No. 1* (May 3, 2013).

C. The Pilot Programs Must Solicit Public Participation and Work with State and Local Entities.

As the Commission notes, the pilot programs may be voluntary for carriers, but they will not be voluntary for their actual customers.¹⁶ It is therefore incumbent on the Commission to ensure that *all* stakeholders—including individual users, consumer groups, and trusted local institutions—are included at every stage of the pilot program process.

When the Commission is designing the structure of the pilot programs and planning the consumer outreach and education components of their implementation, the Commission should work closely with consumers and their local advocates and representatives to forge strong, open lines of communication between the agency designing the trials and the customers experiencing them. Local groups and local public service institutions in particular are most expert in the unique needs of their communities and the best methods for informing and soliciting feedback from users throughout the trial area. Especially if the Commission establishes pilot programs in areas with diverse geographic and socioeconomic characteristics, it will be crucial to turn to the expertise of local community groups and institutions to effectively reach the consumers who will be experiencing the trials first-hand.

The working relationships formed with these institutions and communities while designing the pilot programs will also be necessary in collecting data about how the experimental technologies and network configurations are actually working. Feedback mediated through the carriers participating in the pilot programs will inevitably be less direct and useful than data gathered directly from actual users. The Commission must therefore continue to work with local groups and institutions throughout the pilot programs to gather information about how the transition impacts the customer experience, from designing the questions asked of users and

¹⁶ Trials Public Notice at 3.

planning outreach methods to collecting feedback and troubleshooting unanticipated difficulties connecting with subscribers in the area.

The Commission must also collaborate with state and local governments in choosing, designing, and implementing the pilot programs. In addition to having in-depth knowledge of the communities they serve, state and local governments must be involved because the trials will inevitably have ramifications under state law that must be addressed. Just as the federal government will seek to safeguard the consumer protections outlined in federal law, state governments will also be justified in ensuring that state law protections continue to operate for the benefit of consumers throughout the trials.

D. The Commission Must Have Pre-Considered Mechanisms for Ending the Trials.

Finally, the plans for the pilot programs would not be complete without a set process for winding down the trials. The pilot programs may be small in scale compared to the rest of the country, but they will be impacting real customers who use the phone network to serve real needs. The Commission must therefore have a mechanism to determine what possible consumer harms would trigger an immediate end to the trials, and how the process of stopping the trials will be implemented.

If the pilot programs turn out to create serious deficiencies in the operation of consumers' communications networks, customers will lose access to vital services like access to basic voice service or 9-1-1. The Commission should also maintain a watchful eye for actions by carriers that would unnecessarily foreclose their ability to restore pre-trial service levels, and maintain the authority to order a temporary or permanent end to the trials if they threaten to permanently impose on consumers more limited, untested technologies without the backstop of the technologies users have relied on for decades.

II. The Commission Should Apply the Five Fundamentals in Designing Specific Trials.

As the Commission considers the design and objectives of specific trials, it should bear in mind that any particular trial should be designed to serve the fundamental values of our nation's phone network, both during and after the trial. Public Knowledge, for example, has proposed the Five Fundamentals,¹⁷ which can now be used to frame the issues raised by the proposed trials and provide a checklist to ensure that key features of the network are not compromised by the pilot programs. By staying grounded in a core set of principles that have successfully steered United States communications policy for decades, the Commission can ensure that these programs and the overall phone network transition will reap net benefits without letting the transition constitute a step backward for consumer communities.

A. Wireline to Wireless Trials.

In the Public Notice, the Commission specifically mentions a trial to examine the effects of transitioning customers from traditional wireline phone service to wireless networks. It is true that the reliability, quality, and features of wireless networks must be studied comprehensively and objectively before policymakers or carriers could even think of requiring customers to give up access to their traditional phone service and accept a wireless alternative instead. At the same time, a wireline to wireless trial demonstrates how critical it is that the phone network transition be handled responsibly and in a carefully controlled manner to protect consumers.

As a preliminary matter, the Commission should make it absolutely clear that there will be no "carrier self-help" in this transition. Since the Commission acknowledges there are significant unanswered questions about the quality of wireless service as opposed to wireline

¹⁷ See Comments of Public Knowledge, *Comment Sought on the Technological Transition of the Nation's Communications Infrastructure*, GN Docket No. 12-353 (Jan. 28, 2013), available at <http://apps.fcc.gov/ecfs/comment/view?id=6017160627>.

service, it should firmly establish that carriers have no reasonable expectation that they will be able to launch their own private “pilot programs” or begin their own private wireline-to-wireless transition on their own initiative.¹⁸ For this reason, the Commission should make clear that carriers must seek permission before discontinuing or significantly changing their traditional wireline service to consumers, and the Commission should create a separate process for handling post-natural disaster network transitions.

As Public Knowledge has explained, the Five Fundamentals can be used to shed light on the important questions that would need to be answered during a particular trial—here, a wireline to wireless trial.

The fundamental value of ensuring service to all Americans tells us that the plans for a wireline-to-wireless trial must first include comprehensive, pre-considered metrics for how to measure the trial’s impact on customers’ quality of service. In designing this trial, the Commission should also consider what standards it will be comparing a wireless network’s quality of service to. In order for this information to be maximally useful, we should also be able to compare data for those metrics to the equivalent data for a properly maintained wireline network. This is important because, for example, comparing the quality of a new fixed wireless network to a copper network that the carrier has allowed to degrade would only create perverse incentives for carriers to fail to maintain their networks so that their new fixed wireless networks would seem like a step forward in comparison.

Also within the category of service to all Americans is the question of what specific services will continue to be supported by a wireless network. For this, the Commission should in

¹⁸ See, e.g., Cecilia Kang, *Verizon Wireless Pursues All-Wireless Phone Service In Seaside Town*, THE WASHINGTON POST (July 5, 2013), http://www.washingtonpost.com/business/technology/verizon-pursues-all-wireless-phone-service-in-seaside-ny-town/2013/07/04/9120fa80-ac4c-11e2-a198-99893f10d6dd_story.html.

particular look for support for voice service, calling cards, collect calls, internet access, fax machines, DVRs, medical alert systems, security alarm systems, and accessibility devices for subscribers with disabilities. Of course, often support for these features will not be a matter of the inherent technology involved, but the result of policies setting the expectation that these types of services will continue to be supported, regardless of whether a network is wireline or wireless.

Achieving service to all Americans also requires care for actual adoption, not just theoretical availability of service. The Commission should therefore gather information about pricing during the pilot programs. Here, though, information about carriers' costs may be more informative than actual prices offered during the trial, because the utility of prices offered during a heavily supervised trial will necessarily be limited when trying to predict how carriers will behave once the trial is over. The Commission should also recognize that consumers paying the same price for a service with more limited functionality are effectively bearing a price increase.¹⁹

Network reliability will also be a key question during a wireline-to-wireless trial. In this respect, we must have detailed, public data regarding how often the new wireless network is up, when it goes down and for how long, and why any temporary outages happen. This information will necessarily have significant impact on any policy decisions going forward about the requisite device back-up power carriers must provide to their customers, but the Commission should also keep a close watch to ensure customers have adequate back-up power during the pilot program as well.

The fundamental principle of safeguarding public safety also tells us that any wireline-to-wireless trial should gather information about customers' continued ability to access 9-1-1

¹⁹ Cf. Tom Maguire, *The Fire Island Voice Link Solution*, VERIZON POLICY BLOG (June 3, 2013), <http://publicpolicy.verizon.com/blog/entry/the-fire-island-voice-link-solution>.

service. This inquiry should examine both the actual service delivered and the level of service guaranteed (or not guaranteed) by the carrier. Once the Commission has this data, it must remember that performance metrics like reliable access to 9-1-1 service are not foregone conclusions—they are the products of policy decisions as applied to particular technologies. The Commission need not view the performance standards demonstrated during the trials as a take-it-or-leave-it proposition, and should be ready to demand technological improvements going forwards if that is necessary to protect subscribers.

Finally, the Commission should design the wireline-to-wireless pilot programs to preserve customers' option to move back to wireline service during the transition to ensure that users are consistently protected during the process.²⁰ This is especially important in light of the critical services that significant customers still rely upon that use traditional wireline technology. The Commission's current proposal that customers merely be permitted to switch back to wireline service at the end-date of the pilot program²¹ still leaves open the possibility that certain customers will be deprived of critical services like Life Alert during the pendency of the trial. The Commission should not require customers (who, once again, did not choose to be in the pilot program) to give up life-saving network features they have come to rely upon unless the Commission can ensure that the new technology will offer those customers the same level of service and can provide customers a way to quickly transition back to the previous network if the experimental technology is failing them during the trial. The Commission should also ensure that customers who did switch to an experimental wireless network are informed of all anticipated service changes ahead of time, and not simply given the selected "highlights" by the carrier

²⁰ Trials Public Notice at 9.

²¹ *Id.*

advocating for the transition. On this effort, the Commission could work with consumer groups and local institutions and agencies to design effective outreach and education efforts.

B. VoIP Interconnection Trials

As the Commission considers a pilot program to examine VoIP interconnection, it should remember that a “trial” where the outcome is under the control of a participant with a particular objective in mind will necessarily produce little reliable information about how the participant will behave outside of a controlled, temporary trial. These trials could therefore be useful in some narrow technical ways, but should not be relied upon as a predictor of how interconnection agreements will function in a post-transition world.

Any interconnection trial should therefore not be a “basis for future agreements.”²² A trial itself should only be expected to collect data, not set policy. Particularly for a trial so heavily dependent on the behavioral decisions of the participating carriers, the Commission would have no reasonable basis to assume that the interconnection agreements reached will be the best starting point for interconnection policy on a permanent basis.

Even in the context of the pilot programs, the Commission should provide some backstop to ensure that interconnection agreements in some form are achieved even if negotiations break down.²³ If the Commission permits carriers to simply not interconnect due to differences in negotiating positions, real customers would lose access to voice communications infrastructure. This would be a disaster. After all, even if the customer’s calls can be routed indirectly to its destination, this can result in latency that would be interpreted as a dropped call by current applications and hardware. As the Commission has recognized in the context of complications of

²² *Id.* at 6.

²³ *Id.*

the IP transition on rural call completion,²⁴ the transition to IP does not always operate as smoothly as we anticipate, but that in no way makes it less crucial that basic voice service continues to be available to subscriber throughout and after the transition. The Commission must therefore ensure that consumers are consistently protected while the pilot programs are operating and after they end.

Ultimately, the Commission must ensure that it has the authority to step in and protect consumers if interconnection agreements that threaten basic voice service break down. IP-based interconnection does not alter the fact that the service at issue here is a Title II telecommunications service.²⁵ This does not mean that the Commission could not, in addition to maintaining authority to ensure that networks continue to interconnect, require “updates, reports, and data to the Commission regarding any technical issues as well as any other issues of dispute” as part of the pilot program.²⁶ Indeed, if such information is deemed useful enough to collect in the first place it should also be made available for public access and comment, to fully inform the debate around one of the most important aspects of the IP transition.

C. Multiple Trials in One Geographic Area

The Commission should approach pilot programs that combine multiple trials in one geographic area with great caution, as these trials would be significantly more difficult to undo if complications require the Commission to stop the trial. To that end, the Commission is right to note that it must receive a much more “comprehensive plan” from any proponents of broad

²⁴ See *Rural Call Completion*, Notice of Proposed Rulemaking, WC Docket No. 13-39 (rel. Feb. 7, 2013).

²⁵ See Comments of Public Knowledge in Favor of Granting the Petition, *TW Telecom Inc. Petition For Declaratory Ruling Regarding Direct IP-To-IP Interconnection Pursuant To Section 251(C)(2) Of The Communications Act*, WC Docket No. 11-119 (Aug. 15, 2011).

²⁶ Trials Public Notice at 5.

geographic trials before it can even begin to make a cost/benefit analysis for that trial.²⁷ Any proponent of a broad geographic trial must also explain what additional information would be gleaned from combining multiple pilot programs that could not be learned from more targeted, controlled individual pilot programs. Additionally, the Commission should first solicit public comments on any sufficiently detailed proposals in order to fully weigh the advantages and risks of the proposed trial.

If anything, combining multiple trials in one area could make the data resulting from the pilot more difficult to interpret: if multiple aspects of the network or rules are changed at once, it could be more difficult to pinpoint which change actually caused a particular result in the network. For these reasons the Commission should be very cautious in approving any broader geographic pilot program for the transition.

CONCLUSION

If the Commission decides to move forward with pilot programs, it must ensure that those programs are carefully circumscribed and specifically designed to solely gather data to inform its policy decisions going forward. Pilot programs must not be a glide path to deregulation, nor should they be allowed to impose harms on consumers who were never able to choose whether they wanted to participate in the program. In deciding what information the Commission must gather during the pilot program, the Commission should ensure that it collects information necessary to craft policies that serve the fundamental values that have successfully steered our nation's communications networks for decades.

²⁷ *Id.* at 3.

Respectfully submitted,

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PUBLIC KNOWLEDGE

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